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273 - STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

Subpart A - General (12/95)

273.1 Scope

- (a) This part establishes requirements for managing the following:
 - (1) Batteries as described in 273.2;
 - (2) Pesticides as described in 273.3; (8/00)
 - (3) Thermostats as described in 273.4; and (8/00)
 - (4) Lamps as described in 273.5. (8/00)
- (b) This part provides an alternative set of management standards in lieu of regulation under parts 260 through 272.

273.2 Applicability - batteries

- (a) Batteries covered under part 273
- (1) The requirements of this part apply to persons managing batteries, as described in 273.9, except those listed in paragraph (b) of this section. (8/00)
- (2) Spent lead-acid batteries which are not managed under part 266, subpart G, are subject to management under this part.
- (b) Batteries not covered under part 273. The requirements of this part do not apply to persons managing the following batteries:
- (1) Spent lead-acid batteries that are managed under part 266, subpart G.
- (2) Batteries, as described in 273. 9, that are not yet wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section. (8/00)
- (3) Batteries, as described in 273.9, that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in 261 Subpart C. (8/00)
 - (c) Generation of waste batteries.
- (1) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).
- (2) An unused battery becomes a waste on the date the handler decides to discard it.

273.3 Applicability - pesticides

- (a) Pesticides covered under this part 273. The requirements of this part apply to persons managing pesticides, as described in 273.9, meeting the following conditions, except those listed in paragraph (b) of this section: (8/00)
 - (1) Recalled pesticides that are:
- (i) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b), including, but not limited to those owned by the registrant responsible for conducting the recall: or
- (ii) Stocks of a suspended or canceled pesticide, or a pesticide that is not in compliance with

- FIFRA, that are part of a voluntary recall by the registrant.
- (2) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- (b) Pesticides not covered under part 273. The requirements of this part do not apply to persons managing the following pesticides:
- (1) Recalled pesticides described in paragraph (a)(1) of this section, and unused pesticide products described in paragraph (a)(2) of this section, that are managed by farmers in compliance with 262.70. (262.70 addresses pesticides disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label, providing the container is triple rinsed in accordance with 261.7(b)(3));
- (2) Pesticides not meeting the conditions set forth in paragraph (a) of this section. These pesticides must be managed in compliance with the hazardous waste regulations in parts 260 through 272;
- (3) Pesticides that are not wastes under part 261 of this chapter, including those that do not meet the criteria for waste generation in paragraph (c) of this section or those that are not wastes as described in paragraph (d) of this section; and
- (4) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is listed in part 261, subpart D or if it exhibits one or more of the characteristics identified in part 261, subpart C.
 - (c) When a pesticide becomes a waste
- (1) A recalled pesticide described in paragraph (a)(1) of this section becomes a waste on the first date on which both of the following conditions apply:
- (i) The generator of the recalled pesticide agrees to participate in the recall; and
- (ii) The person conducting the recall decides to discard (e.g., burn the pesticide for energy recovery).
- (2) An unused pesticide product described in paragraph (a)(2) of this section becomes a waste on the date the generator decides to discard it.
- (d) Pesticides that are not wastes. The following pesticides are not wastes:
- (1) Recalled pesticides described in paragraph (a)(1) of this section, provided that the person conducting the recall:
- (i) has not made a decision to discard (e.g., burn for energy recovery) the pesticide. Until such a decision is made, the pesticide does not meet the definition of "solid waste" under 261.2; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including part 273 of this chapter. This pesticide remains subject to the requirements of FIFRA; or
- (ii) has made a decision to use a management option that, under 261.2, does not cause the pesticide to be a solid waste (i.e., the selected option is use (other than use constituting disposal) or reuse (other than

burning for energy recovery), or reclamation). Such a pesticide is not a solid waste and therefore is not a hazardous waste, and is not subject to the hazardous waste requirements including part 273 of this chapter. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA.

(2) Unused pesticide products described in paragraph (a)(2) of this section, if the generator of the unused pesticide product has not decided to discard (e.g., burn for energy recovery) them. These pesticides remain subject to the requirements of FIFRA.

273.4 Applicability - mercury thermostats

- (a) Thermostats covered under this part 273. The requirements of this part apply to persons managing thermostats, as described in 273.9, except those listed in paragraph (b) of this section. (8/00)
- (b) Thermostats not covered under part 273. The requirements of this part do not apply to persons managing the following thermostats:
- (1) Thermostats that are not yet wastes under part 261 of this chapter. Paragraph (c) of this section describes when thermostats become wastes.
- (2) Thermostats that are not hazardous waste. A thermostat is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C.
 - (c) Generation of waste thermostats.
- (1) A used thermostat becomes a waste on the date it is discarded (e.g., sent for reclamation).
- (2) An unused thermostat becomes a waste on the date the handler decides to discard it.

273.5 Applicability - Lamps (8/00)

- (a) Lamps covered under this part 273. The requirements of this part apply to persons managing lamps as described in 273.9, except those listed in paragraph (b) of this section.
- (b) Lamps not covered under this part 273. The requirements of this part do not apply to persons managing the following lamps:
- (1) Lamps that are not yet wastes under part 261 of this chapter as provided in paragraph (c) of this Section.
- (2) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in part 261, subpart C of this chapter.
 - (c) Generation of waste lamps.
- (1) A used lamp becomes a waste on the date it is discarded.
- (2) An unused lamp becomes a waste on the date the handler decides to discard it.

273.6 [Reserved 8/00]

273.7 [Reserved 8/00]

273.8 Applicability - household and conditionally exempt small quantity generator waste. (8/00)

- (a) Persons managing the wastes listed below may, at their option, manage them under the requirements of this part:
- (1) Household wastes that are exempt under 261.4(b)(1) of this chapter and are also of the same type as the universal wastes defined at 273.9; and/or (8/00)
- (2) Conditionally exempt small quantity generator wastes that are exempt under 261.5 of this chapter and are also of the same type as the universal wastes defined at 273.9. (8/00)
- (b) Persons who commingle the wastes described in Paragraphs (a)(1) and (a)(2) of this section together with universal waste regulated under this part must manage the commingled waste under the requirements of this part.

273.9 Definitions

Battery means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

Destination facility means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in subparagraphs (a) and (c) of sections 273.13 and 273.33. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

FIFRA means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 - 136y). Generator means any person, by site, whose act or process produces hazardous waste identified or listed in part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation.

Generator means any person, by site, whose act or process produces hazardous waste identified or listed in part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation.

Lamp, also referred to as "universal waste lamp" is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infrared regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high-pressure sodium, and metal halide lamps. (8/00)

Large Quantity Handler of Universal Waste means a universal waste handler (as defined in this section) who accumulates 5,000 kilograms or more total of universal

waste (batteries, pesticides, thermostats, or lamps, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated. (8/00)

On-site means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a crossroads intersection, and access is by crossing as opposed to going along the right of way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, are also considered on-site property.

Pesticide means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:

- (a) is a new animal drug under FFDCA section 201(w), or
- (b) is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or
- (c) is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (a) or (b) of this section.

Small Quantity Handler of Universal Waste means a universal waste handler (as defined in this section) who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, thermostats, or lamps, calculated collectively) at any time. (8/00)

Thermostat means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 273.13(c)(2) or 273.33(c)(2).

Universal Waste means any of the following hazardous wastes that are subject to the universal waste requirements of part 273:

- (a) Batteries as described in 273.2;
- (b) Pesticides as described in 273.3; and
- (c) Thermostats as described in 273.4; and (8/00)
- (d) Lamps as described in 273.5. (8/00)

Universal Waste Handler:

- (a) Means:
- (1) A generator (as defined in this section) of universal waste; or
- (2) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
 - (b) Does not mean:

- (1) A person who treats (except under the provisions of 273.13(a) or (c), or 273.33(a) or (c)), disposes of, or recycles universal waste; or
- (2) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

Universal Waste Transfer Facility means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

Universal Waste Transporter means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

Subpart B - Standards for Small Quantity Handlers of Universal Waste

273.10 Applicability

This subpart applies to small quantity handlers of universal waste (as defined in 273.9). (8/00)

273.11 Prohibitions

A small quantity handler of universal waste is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 273.17; or by managing specific wastes as provided in 273.13.

273.12 Notification

A small quantity handler of universal waste is not required to notify the Department of universal waste handling activities.

273.13 Waste management

- (a) Universal waste batteries: A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
 - (i) sorting batteries by type;
 - (ii) mixing battery types in one container;

- (iii) discharging batteries so as to remove the electric charge;
 - (iv) regenerating used batteries;
- (v) disassembling batteries or battery packs into individual batteries or cells;
- (vi) removing batteries from consumer products; or
 - (vii) removing electrolyte from batteries.
- (3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in part 261, subpart C.
- (i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to part 262.
- (ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.
- (b) Universal waste pesticides. A small quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:
- (1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
- (2) A container that does not meet the requirements of paragraph (1), provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (1); or
- (3) A tank that meets the requirements of part 265 subpart J, except for 265.197(c), 265.200, and 265.201; or
- (4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (c) Universal waste thermostats: A small quantity handler of universal waste must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A small quantity handler of universal waste must contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the thermostat,

- and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats provided the handler:
- (i) Removes the ampules in a manner designed to prevent breakage of the ampules;
- (ii)Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
- (iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of 262.34;
- (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 262.34;
- (v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
- (vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
- (vii) Stores removed ampules in closed, non-leaking containers that are in good condition;
- (viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and
- (3) (i) A small quantity handler of universal waste who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in part 261, subpart C:
- (A) Mercury or clean-up residues resulting from spills or leaks; and/or
- (B) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).
- (ii) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it is subject to part 262.
- (iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.
- (d) Lamps. A small quantity handler of universal waste must manage lamps in a way that prevents

releases of any universal waste or component of a universal waste to the environment, as follows: (8/00)

- (1) A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A small quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

273.14 Labeling/marking

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

- (a) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Battery(ies), or "Waste Battery(ies)," or "Used Battery(ies);"
- (b) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 273.3(a)(1) are contained must be labeled or marked clearly with:
- (1) The label that was on or accompanied the product as sold or distributed; and
- (2) The words "Universal Waste Pesticide(s)" or "Waste Pesticide(s):"
- (c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 273.3(a)(2) are contained must be labeled or marked clearly with:
- (1) (i) The label that was on the product when purchased, if still legible;
- (ii) If using the labels described in paragraph (1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;
- (iii) If using the labels described in paragraphs (1)(i) and (1)(ii) is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
- (2) The words "Universal Waste Pesticide(s)" or "Waste Pesticide(s)."
- (d) Universal waste thermostats (i.e., each thermostat), or a container in which the thermostats are contained, must be labeled or marked clearly with any

- one of the following phrases: "Universal Waste Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)".
- (e) Each lamp or a container or package in which such lamps are contained must be labeled or marked clearly with one of the following phrases: "Universal Waste Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)." (8/00)

273.15 Accumulation time limits

- (a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of paragraph (b) are met.
- (b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
- (1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received:
- (2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
- (3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
- (4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
- (5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
- (6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

273.16 Employee training

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.

273.17 Response to releases

- (a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) A small quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of parts 260 through 272. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with part 262.

273.18 Off-site shipments

- (a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- (b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste.
- (c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171-180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 180;
- (d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
- (e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
- (1) Receive the waste back when notified that the shipment has been rejected, or
- (2) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:
- (i) Send the shipment back to the originating handler, or

- (ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (g) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Department will provide instructions for managing the hazardous waste.
- (h) If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

273.19 Tracking universal waste shipments

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

273.20 Exports

A small quantity handler of universal waste who sends universal waste to a foreign destination other than to those OECD countries specified in 262.58(a)(1) (in which case the handler is subject to the requirements of part 262, subpart H) must: (9/98)

- (a) Comply with the requirements applicable to a primary exporter in 262.53, 262.56(a)(1) through (4), (6), and (b) and 262.57;
- (b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in subpart E of part 262 of this chapter; and
- (c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

Subpart C - Standards for Large Quantity Handlers of Universal Waste

273.30 Applicability

This subpart applies to large quantity handlers of universal waste as defined in 273.9. (8/00)

273.31 Prohibitions

A large quantity handler of universal waste is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 273.37; or by managing specific wastes as provided in 273.33.

273.32 Notification

(a)(1) Except as provided in paragraphs (a)(2) and (3) of this section, a large quantity handler of universal waste must have sent written notification of universal waste management to the Department, and received an

- EPA Identification Number, before meeting or exceeding the 5,000 kilogram storage limit.
- (2) A large quantity handler of universal waste who has already notified the Department of his hazardous waste management activities and has received an EPA Identification Number is not required to renotify under this section.
- (3) A large quantity handler of universal waste who manages recalled universal waste pesticides as described in 273.3(a)(1) and who has sent notification to the EPA as required by 40 CFR part 165 is not required to notify for those recalled universal waste pesticides under this section.
 - (b) This notification must include:
- (1) The universal waste handler's name and mailing address;
- (2) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;
- (3) The address or physical location of the universal waste management activities;
- (4) A list of all of the types of universal waste managed by the handler (e.g., batteries, pesticides, thermostats, lamps); (8/00)
- (5) A statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time and the types of universal waste (e.g., batteries, pesticides, thermostats, lamps) the handler is accumulating above this quantity. (8/00)

273.33 Waste management

- (a) Universal waste batteries: A large quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A large quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A large quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
 - (i) sorting batteries by type;
 - (ii) mixing battery types in one container;
- (iii) discharging batteries so as to remove the electric charge;
 - (iv) regenerating used batteries;

- (v) disassembling batteries or battery packs into individual batteries or cells;
- (vi) removing batteries from consumer products; or
 - (vii) removing electrolyte from batteries.
- (3) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in part 261, subpart C.
- (i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of parts 260 through 272. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to part 262.
- (ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.
- (b) Universal waste pesticides: A large quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:
- (1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
- (2) A container that does not meet the requirements of paragraph (1), provided that the unacceptable container is overpacked in a container that does meet the requirements of paragraph (1); or
- (3) A tank that meets the requirements of part 265 subpart J, except for 265.197(c), 265.200, and 265.201; or
- (4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (c) Universal waste thermostats: A large quantity handler of universal waste must manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A large quantity handler of universal waste must contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the thermostat, and must lack evidence of leakage, spillage, or damage

that could cause leakage under reasonably foreseeable conditions.

- (2) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats provided the handler:
- (i) removes the ampules in a manner designed to prevent breakage of the ampules;
- (ii) removes ampules only over or in a containment device (e.g., tray or pan sufficient to contain any mercury released from an ampule in case of breakage);
- (iii) ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that meets the requirements of 262.34;
- (iv) immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 262.34;
- (v) ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
- (vi) ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
- (vii) stores removed ampules in closed, non-leaking containers that are in good condition;
- (viii) packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and
- (3) (i) A large quantity handler of universal waste who removes mercury-containing ampules from thermostats must determine whether the following exhibit a characteristic of hazardous waste identified in part 261, subpart C:
- (A) mercury or clean-up residues resulting from spills or leaks; and/or
- (B) other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units).
- (ii) If the mercury, residues, and/or other solid waste exhibit a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of parts 260 through 272. The handler is considered the generator of the mercury, residues, and/or other waste and is subject to part 262.
- (iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.
- (d) Lamps. A large quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows: (8/00)

- (1) A large quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- (2) A large quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

273.34 Labeling/marking

A large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:

- (a) Universal waste batteries (i.e., each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with the any one of the following phrases: "Universal Waste Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies);"
- (b) A container (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 273.3(a)(1) are contained must be labeled or marked clearly with:
- (1) The label that was on or accompanied the product as sold or distributed; and
- (2) The words "Universal Waste Pesticide(s)" or "Waste Pesticide(s);"
- (c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 273.3(a)(2) are contained must be labeled or marked clearly with:
- (1)(i) The label that was on the product when purchased, if still legible;
- (ii) If using the labels described in paragraph (1)(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172;
- (iii) If using the labels described in paragraphs (1)(i) and (1)(ii) is not feasible, another label prescribed or designated by the pesticide collection program; and
- (2) The words "Universal Waste Pesticide(s)" or "Waste Pesticide(s)."
- (d) Universal waste thermostats (i.e., each thermostat), or a container or tank in which the thermostats are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Mercury Thermostat(s)," or "Waste

Mercury Thermostat(s)," or "Used Mercury Thermostat(s).

(e) Each lamp or a container or package in which such lamps are contained must be labeled or marked clearly with any one of the following phrases: "Universal Waste - Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)." (8/00)

273.35 Accumulation time limits

- (a) A large quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of paragraph (b) are met.
- (b) A large quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity was solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (c) A large quantity handler of universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
- (1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
- (2) Marking or labeling the individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
- (3) Maintaining an inventory system on-site that identifies the date the universal waste being accumulated became a waste or was received;
- (4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
- (5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received: or
- (6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

273.36 Employee training

A large quantity handler of universal waste must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies.

273.37 Response to releases

- (a) A large quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) A large quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of parts 260 through 272. The handler is considered the generator of the material resulting from the release, and is subject to part 262.

273.38 Off-site shipments

- (a) A large quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- (b) If a large quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subpart D of this part while transporting the universal waste.
- (c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR 171-180, a large quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR parts 172 180;
- (d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
- (e) If a large quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
- (1) Receive the waste back when notified that the shipment has been rejected, or
- (2) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (f) A large quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:
- (i) Send the shipment back to the originating handler, or

- (ii) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (g) If a large quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Department will provide instructions for managing the hazardous waste.
- (h) If a large quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.

273.39 Tracking universal waste shipments

- (a) Receipt of shipments. A large quantity handler of universal waste must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:
- (1) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
- (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);
- (3) The date of receipt of the shipment of universal waste.
- (b) Shipments off-site. A large quantity handler of universal waste must keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading or other shipping document. The record for each shipment of universal waste sent must include the following information:
- (1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
- (2) The quantity of each type of universal waste sent (e.g., batteries, pesticides, thermostats);
- (3) The date the shipment of universal waste left the facility.
 - (c) Record retention.
- (1) A large quantity handler of universal waste must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.
- (2) A large quantity handler of universal waste must retain the records described in paragraph (b) of this section for at least three years from the date a shipment of universal waste left the facility.

273.40 Exports

A large quantity handler of universal waste who sends universal waste to a foreign destination other than to

- those OECD countries specified in 262.58(a)(1) (in which case the handler is subject to the requirements of part 262, subpart H) must: (9/98)
- (a) Comply with the requirements applicable to a primary exporter in 262.53, 262.56(a)(1) through (4), (6), and (b) and 262.57;
- (b) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in subpart E of part 262 of this chapter; and
- (c) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.

Subpart D - Standards for Universal Waste Transporters

273.50 Applicability

This subpart applies to universal waste transporters (as defined in 273.9). (8/00)

273.51 Prohibitions

A universal waste transporter is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 273.54.

273.52 Waste management

- (a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 CFR part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 CFR 171.8. For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency/South Carolina Hazardous Waste Management Regulations specified in 40 CFR 262/R.61-79.262. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As universal waste shipments do not require a manifest under 262, they may not be described by the DOT proper shipping name "hazardous waste, (l) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".

273.53 Storage time limits

(a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.

(b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of subparts B or C of this part while storing the universal waste.

273.54 Response to releases

- (a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) A universal waste transporter must determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of parts 260 through 272. If the waste is determined to be a hazardous waste, the transporter is subject to part 262.

273.55 Off-site shipments

- (a) A universal waste transporter is prohibited from transporting the universal waste to a place other that a universal waste handler, a destination facility, or a foreign destination.
- (b) If the universal waste being shipped off-site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 CFR part 172.

273.56 Exports

A universal waste transporter transporting a shipment of universal waste to a foreign destination other than to those OECD countries specified in 262.58(a)(1) (in which case the transporter is subject to the requirements of part 262, subpart H) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that: (9/98)

- (a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and
- (b) The shipment is delivered to the facility designated by the person initiating the shipment.

Subpart E - Standards for Destination Facilities

273.60 Applicability

- (a) The owner or operator of a destination facility (as defined in 273.9) is subject to all applicable requirements of parts 264, 265, 266, 268, 270, and 124 of this chapter, and the notification requirement under 44-56-20 of the South Carolina Hazardous Waste Management Act and section 3010 of RCRA. (8/00)
- (b) The owner or operator of a destination facility that recycles a particular universal waste without storing that universal waste before it is recycled must comply with 261.6(c)(2).

273.61 Off-site shipments

- (a) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than a universal waste handler, another destination facility or foreign destination.
- (b) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, he must contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility must:
- (1) Send the shipment back to the original shipper, or
- (2) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
- (c) If the a owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility must immediately notify the Department of the illegal shipment, and provide the name, address, and phone number of the shipper. The Department will provide instructions for managing the hazardous waste.
- (d) If the owner or operator of a destination facility receives a shipment of non-hazardous, non-universal waste, the owner or operator may manage the waste in any way that is in compliance with applicable federal or state solid waste regulations.

273.62 Tracking universal waste shipments

- (a) The owner or operator of a destination facility must keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received must include the following information:
- (1) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent;
- (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, thermostats);
- (3) The date of receipt of the shipment of universal waste.
- (b) The owner or operator of a destination facility must retain the records described in paragraph (a) of this section for at least three years from the date of receipt of a shipment of universal waste.

Subpart F - Import Requirements

273.70 Imports

Persons managing universal waste that is imported from a foreign country into the United States are subject to the applicable requirements of this part, immediately after the waste enters the United States, as indicated in paragraphs (a) through (c) of this section: (9/98)

- (a) A universal waste transporter is subject to the universal waste transporter requirements of subpart D of
- (b) A universal waste handler is subject to the small or large quantity handler of universal waste requirements of subparts B or C, as applicable.
- (c) An owner or operator of a destination facility is subject to the destination facility requirements of subpart E of this part.
- (d) Persons managing universal waste that is imported from an OECD country as specified in 262.58(a)(1) are subject to paragraphs (a) through (c) of this section, in addition to the requirements of 262, subpart H.

Subpart G - Petitions to Include Other Wastes under **40 CFR Part 273**

273.80 General

- (a) Any person seeking to add a hazardous waste or a category of hazardous waste to this part may petition for a regulatory amendment under this subpart and 40 CFR 260.20 and 260.23.
- (b) To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that regulation under the universal waste regulations of 40 CFR part 273 is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must include the information required by 40 CFR 260.20(b). The petition should also address as many of the factors listed in 40 CFR 273.81 as are appropriate for the waste or waste category addressed in the petition.
- (c) The Administrator will evaluate petitions using the factors listed in 40 CFR 273.81. The Administrator will grant or deny a petition using the factors listed in 40 CFR 273.81. The decision will be based on the weight of evidence showing that regulation under 40 CFR part 273 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.

273.81 Factors for Petitions to Include Other Wastes under 40 CFR Part 273

(a) The waste or category of waste, as generated by a wide variety of generators, is listed in subpart D of part 261 of this chapter, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of

- hazardous waste identified in subpart C of part 261 of this chapter. (When a characteristic waste is added to the universal waste regulations of this part 273 by using a generic name to identify the waste category (e.g., hazardous waste batteries), the definition of universal waste in 260.10 of this chapter and 273.9 will be amended to include only the hazardous waste portion of the waste category (e.g., hazardous waste batteries).) Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of this part 273; (8/00)
- (b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as large industrial facilities):
- (c) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste:
- (e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to 40 CFR 273.13, 273.33, and 273.52; and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (f) Regulation of the waste or category of waste under part 273 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, nonhazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with Subtitle C of RCRA.
- (g) Regulation of the waste or category of waste under 40 CFR part 273 will improve implementation of and compliance with the hazardous waste regulatory program; and/or
 - (h) Such other factors as may be appropriate.